

Mr. John Mott-Smith
Director of Voting Systems
Office of the Secretary of State
1500 11th Street
California,

28 September 2004

Subject: Review of Sequoia Voting System's Teamwork, Versions 6.1 and 8.0e.

EXECUTIVE SUMMARY

This review is limited to a review of the Teamwork Operators Guide, change records, and basic installation disks for Teamwork versions 6.1 and 8.0e provided. No testing was completed as part of this review against Teamwork versions 6.1 or 8.0e and Datavote ballot readers.

Based on the limited review of documents submitted, there were no obvious problems found other than the weak technical security. Local jurisdictions using the system shall need to be cautious and restrict all access to the system before, during, and after the election and provide checks to confirm if the Teamwork software has been modified from the installation.

References:

[Ver6.1] Sequoia Pacific Voting Equipment, *Teamwork 6.1 Software Enhancements*, [undated]

[Ver8.0e] Sequoia Pacific Voting Equipment, *Teamwork 8.0e Software Enhancements*, [undated]

[Teamwork], Sequoia Pacific Voting Equipment, Teamwork Operator's Guide, [No version identification]

Introduction

Teamwork is an election management system that is used to support a variety of older ballot scanners. It is currently used to support Datavote punch card readers in California. Teamwork is a DOS based system that is expected to be replaced by Sequoia's Windows based WinEDS in a later release but not before the November 2004 election.

Security

Teamwork's security is weak by newer standards but includes a password based security access system which allows the users to designate user accounts for specific roles with access limited to specific functions. The passwords may vary from zero to ten characters in length using a mixture of letters, numbers, and special characters. No encryption is apparent; a few critical files are stored as plain text and readily accessed or altered without apparent integrity checks. Other critical files are standard Micro Focus COBOL indexed sequential data files. No information was provided to describe the security on the upload and download of data beyond the physical security

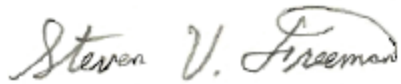
California Requirements

Provisional ballots and write-ins are processed using manual procedures. California rotation rules are asserted using manual specification of rotation for each contest. ABO 190 primary reporting is not obviously supported at the level of documentation provided for this report but may be supported by some of changes listed with [Ver6.1] for larger elections. Teamwork was allegedly used in prior elections, including the March 2004 primary, with no problems reported for reference in this report.

Conclusion

Within the limited review of documents submitted and history of use, there were no obvious problems found other than the weak technical security. Local jurisdictions using the system shall need to be cautious and restrict all access to the system before, during, and after the election and provide checks to confirm if the Teamwork software and data files have not been modified from the installation.

Sincerely,

A handwritten signature in cursive script that reads "Steven V. Freeman". The signature is written in dark ink and is positioned below the word "Sincerely,".

Steven V. Freeman